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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,207	12/22/2000	Billy G. Moon	062891.0518	1316

7590 10/23/2003

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EXAMINER

DAVIS, TEMICA M

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 10/23/2003

2

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/746,207

Applicant(s)
Moon et al.

Examiner
Temica M. Davis

Art Unit
2681



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Dec 22, 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 2681

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. Claims 1-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Toh, U.S. Patent No. 5,987,011.

Regarding claims 1, 14, 30 and 42, Toh discloses routing communications at a mobile station, comprising: at a mobile station, determining one or more routing metrics associated with each of a plurality of communication paths coupling the mobile station and a destination device (col. 6, lines 48-60, col. 7, lines 42-50, col. 17, line 58-col. 18, line 5), wherein at least one of the routing metrics comprises the link quality of at least one wireless communication link included in each of the communication paths (col. 3, lines 39-56); at the mobile station, receiving routing information from one or more routers coupling the mobile station and the destination device

Art Unit: 2681

(col. 3, line 57-col. 4, line 10); and routing a communication to the destination device based on the determined routing metrics and the received routing information (col. 9, line 14-col. 10, line 20).

Regarding claims 2, 15 and 31, Toh discloses the invention of Claims 1, 14 and 30 wherein determining the link quality of the wireless communication link comprises measuring the link quality of the wireless communication links immediately before routing the communication (col. 9, lines 14-21).

Regarding claims 3, 17 and 32, Toh discloses the invention of Claims 1, 14 and 30, wherein determining the link quality of the wireless communication link comprises measuring the bit error rate of the wireless communication link (col. 9, lines 8-13).

Regarding claims 4, 18 and 33, Toh discloses the invention of Claims 1, 14 and 30, wherein determining the link quality of the wireless communication link comprises measuring the link quality using a control channel established with a device with which the wireless communication link is to be established (col. 7, lines 41-50).

Regarding claims 5, 19 and 34, Toh discloses the invention of Claims 1, 14 and 30, wherein at least two of the communication paths include wireless communication links using different wireless communication protocols (col. 18, lines 31-47).

Regarding claims 6, 20 and 35, Toh discloses the invention of Claims 5, 19 and 34, wherein at least one of the wireless communication protocols is not a cellular telephone communication protocol (col. 6, lines 7-11).

Art Unit: 2681

Regarding claim 7, Toh discloses the invention of Claim 1, wherein routing the communication comprises transmitting the communication from the mobile station using inherently a wireless communication interface of the mobile station (col. 9, line 14-col. 10, line 20).

Regarding claims 8, 24 and 36, Toh discloses the invention of Claims 1, 14 and 30, wherein at least one of metrics comprises the power requirements of at least one wireless communication link included in each of the communication paths (col. 18, line 61-col. 19, line 31).

Regarding claims 9, 25 and 37, Toh discloses the invention of Claims 1, 14 and 30, wherein the communication comprises a packet-based communication (col. 7, lines 51-55).

Regarding claims 10, 26 and 38, Toh discloses the invention of Claims 1, 14 and 30, wherein the communication comprises a circuit-switched communication (col. 18, lines 31-47).

Regarding claims 11, 27 and 39, Toh discloses the invention of Claims 1, 14 and 30, wherein the routing information received at the mobile station comprises network topology information (col. 2, lines 49-53).

Regarding claims 12, 28 and 40, Toh discloses the invention of Claims 1, 14 and 30, wherein the routing information received at the mobile station comprises a routing table or a portion of a routing table (col. 13, lines 2-8).

Regarding claims 13, 29 and 41, Toh discloses the invention of Claims 1, 14 and 30, further comprising communicating routing information from the mobile station to one or more of

Art Unit: 2681

the routers coupling the mobile station and the destination device to enable the routers to transmit communications from the destination device to the mobile station (col. 3, line 65-col. 4, line 10).

Regarding claim 16, Toh discloses the invention of Claim 14, wherein the router receives link quality information from another component of the mobile station (col. 17, line 58-col. 18, line 5).

Regarding claim 21, Toh discloses the invention of Claim 14, wherein the router is further operable to determine at least a portion of one or more communication paths available between the mobile station and the destination device by receiving information about the availability of one or more communication links from one or more routers external to the mobile station (col. 18, lines 6-30).

Regarding claim 22, Toh discloses the invention of Claim 21, wherein the router is further operable to determine at least a portion of one or more communication paths available between the mobile station and the destination device by receiving information about the availability of one or more communication links from one or more routers external to the mobile station (col. 8, lines 6-30).

Regarding claim 23, Toh discloses the invention of Claim 14, wherein routing the communication comprises transmitting the communication to one of the wireless communication interfaces (col. 9, line 14-col. 10, line 20).

Art Unit: 2681

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pelech et al, U.S. Patent No 6,243,585, discloses wireless communications network whose facilities are mobile and whose topology are dynamic.

Kamm et al, U.S. Patent No. 5,457,680, discloses a data gateway for mobile data radio terminals in a data communication network.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temica M. Davis whose telephone number is (703) 306-5837. The examiner can normally be reached on Monday-Thursday from 7:00 am to 4:00 pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Sinh Tran, can be reached on (703) 305-4040.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC2600 Customer Service whose telephone number is (703)306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for any communications intended for entry).

Application/Control Number: 09/746,207

Page 7

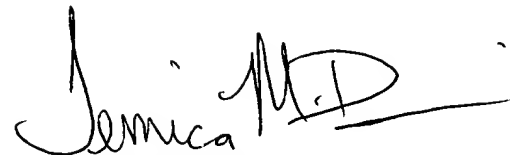
Art Unit: 2681

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington.

VA., Sixth Floor (Receptionist).

TMD

October 19, 2003


TEMICA M. DAVIS
PATENT EXAMINER